

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (Previously presented) A signal processing apparatus which processes a signal outputted from an image pickup element having filters arranged to use plural kinds of colors, comprising:

interpolation circuit which generates a plurality of color signals for each pixel position of the image pickup element by interpolation based on signals of pixels adjacent to said each pixel position of the image pickup element;

color-difference signal forming circuit for forming color-difference signals based on output of said interpolation circuit;

suppression circuit being provided between said color interpolation circuit and said color-difference signal forming circuit, which suppresses the plurality of color signals generated by said interpolation circuit, if a level of a luminance signal is out of a predetermined range;

wherein it is so constructed that plurality of color signals suppressed which are output from said suppression circuit is regarded as input of said color-difference signal forming circuit.

Claims 2-4 (Cancelled)

Claim 5 (Previously presented) A signal processing apparatus which processes a signal outputted from an image pickup element having complementary color filters, comprising:

interpolation circuit which generates complementary color signals for each pixel position of the image pickup element by interpolation based on signals of pixels adjacent to said each pixel position of the image pickup element;

RGB matrix circuit which generates RGB signals from the complementary color signals interpolated by said interpolation circuit;

color-difference signal forming circuit for forming color-difference signals based on the output by said RGB matrix circuit; and

suppression circuit being provided between said interpolation circuit and said color-difference signal forming circuit, which suppresses the RGB signals generated by said RGB matrix circuit, if a level of a luminance signal is out of a predetermined range;

wherein it is so constructed that RGB signals outputted from said suppression circuit are input into said color-difference signal forming circuit.

Claims 6-8 (Cancelled)

Claim 9 (Previously presented) A signal processing apparatus which processes a signal outputted from an image pickup element having complementary color filters, comprising:

interpolation circuit which generates complementary color signals for each pixel position of the image pickup element by interpolation based on signals of pixels adjacent to each said pixel position of the image pickup element;

RGB matrix circuit which generates RGB signals from the complementary color signals; and

suppression circuit being provided between said interpolation circuit and said RGB matrix circuit, which suppresses the complementary color signals interpolated by said interpolation circuit, if a level of luminance signal is out of a predetermined range;

wherein it is so constructed that the color signals outputted from said suppression circuit are inputted into RGB matrix circuit.

Claims 10-11 (Cancelled)

Claim 12 (Previously presented) A signal processing apparatus which processes a signal outputted from an image pickup element having filters arranged to use plural kinds of colors, comprising:

interpolation circuit which generates complementary color signals for each pixel position of the image pickup element by interpolation based on signals of pixels which adjacent to said each pixel position of the image pickup element; and

suppression circuit provided between said image pickup element and said interpolation circuit, which suppresses a color signal outputted from the image pickup circuit, if a level of a luminance signal is out of a predetermined range.

Claims 13-28 (Cancelled)

Claim 29 (Currently amended) A signal processing apparatus which processes a signal outputted from an image pickup element having filters arranged to use plural kinds of colors, comprising:

a color-suppression circuit, provided for primary color signals or complementary color signals obtained from said image pickup element, for color-suppressing said primary color signals or said complementary color signals ~~in accordance with the~~ so that a color-suppression is reduced as a level of luminance signal increases in a high level part of a luminance signal over a predetermined value; and

a color signal processing circuit which processes output by said suppression circuit.

Claims 30-33 (Cancelled)

Claim 34 (Previously presented) A signal processing apparatus according to claim 1, further comprising gamma correction circuit provided between said suppression circuit and said color-difference signal forming circuit, which performs gamma correction on the plurality of color signals outputted from said suppression circuit.

Claim 35 (Previously presented) A signal processing apparatus according to claim 34, further comprising luminance signal correcting circuit which corrects the luminance signal on the basis of the plurality of color signals suppressed by said suppression circuit.

Claim 36 (Previously presented) A signal processing apparatus according to claim 35, wherein said luminance signal correcting circuit corrects the luminance signal before the luminance signal is gamma-corrected.

Claim 37 (Previously presented) A signal processing apparatus according to claim 5, further comprising gamma correction circuit provided between said suppression circuit and said color-difference signal forming circuit, which performs gamma correction on the RGB signals outputted from said suppression circuit.

Claim 38 (Previously presented) A signal processing apparatus according to claim 37, further comprising luminance signal correcting circuit which corrects the luminance signal on the basis of the RGB signals suppressed by said suppression circuit.

Claim 39 (Previously presented) A signal processing apparatus according to claim 38, wherein said luminance signal correcting circuit corrects the luminance signal before the luminance signal is gamma-corrected.

Claim 40 (Previously presented) A signal processing apparatus according to claim 9, further comprising luminance signal correcting circuit which corrects the luminance signal on the basis of the complementary color signals suppressed by said suppression circuit.

Claim 41 (Previously presented) A signal processing apparatus according to claim 40, wherein said luminance signal correcting circuit corrects the luminance signal before the luminance signal is gamma-corrected.

Claim 42 (Previously presented) A signal processing apparatus according to claim 12, further comprising luminance signal correcting image pickup circuit which corrects the luminance signal on the basis of the color signal suppressed by said suppression circuit.

Claim 43 (Previously presented) A signal processing apparatus according to claim 42, wherein said luminance signal correcting circuit corrects the luminance signal before the luminance signal is gamma-corrected.

Claim 44 (Previously presented) A signal processing apparatus according to claim 29, wherein said color signal processing circuit is a gamma-correction circuit for gamma-correcting the output signals suppressed by said suppression circuit.

Claim 45 (Previously presented) A signal processing apparatus according to claim 29, wherein said color signal processing circuit is a color-difference signal forming circuit for converting the output signals color-suppressed by said color-suppression circuit into color-difference signals.

Claim 46 (Previously presented) A signal processing apparatus according to claim 29, further comprising:

A/D conversion circuit for A/D converting primary color signals or complementary color signals obtained from said image pickup element before said color-suppression circuit.